

THE TECH

Boston, Massachusetts.

November 22, 1894.

Volume XIV.

Number 9.

PRIEST'S DINING ROOMS.

102 Dartmouth Street, Boston.

21 Meals (full ticket), \$4.00. 14 Meals, Breakfast and Dinner, \$3.00. 7 Meals, Breakfast, \$1.50. 7 Meals, Lunch, \$1.40. 7 Meals, Dinner, \$1.75.

Hours for Meals.—Week Days: Breakfast 6 to 10; Lunch, 12 to 2.30; Dinner, 5 to 8. Sundays: Breakfast, 8 to 10.30; Dinner, 12.30 to 3.30; Lunch, 5.30 to 7.30.

C. M. PRIEST, Proprietor.

THE HOTEL HUNTINGTON,

COPLEY ROUARE AND HENTINGTON AVENUE.



Offers large and pleasant outside rooms, from \$7.00 per week upward.

Dining room s conducted on European plan.

An elegant Gentlemen's Café has recently been added

C. A. JONES & CO.,

PROPRIETORS.

STUDENTS' SUPPLIES.

Blank Books, Note Books, Drawing Papers, Pens, Inks of all kinds, Fountain Pens.

PERIODICALS AND MAGAZINES.

Writing Paper and Envelopes with TECH Monogram and Imprint Paper by the pound, at

SOUTHWELL'S,

Corner Dartmouth Street and Columbus Avenue, and 439 Boylston Street.

2d door from Berkeley Street.

OAK GROVE CREAMERY CO., DAIRY LUNCH ROOM,

445 BOYLSTON STREET, CORNER BERKELEY,

Where can be had Sandwiches of all kinds, Soups, Tea, Coffee, and regular Dairy Lunch.

Pure Fresh-churned Butter, in Quarter-pound Prints, Five and Ten Pound Boxes, Pure, Fresh Milk and Cream, delivered in Glass Jars. Fresh-laid Eggs.
Pure, Full Cream Cheese, American (plain), Sage, Neuf-chatel and Edam. All kinds of Fruit Ices.

NELSON L. MARTIN.

T. E. Moseley & Co., FINE SHOES____

A large assortment of all styles for YOUNG MEN.

Our Calf Balmorals at \$4.00, \$4.50, and \$5.00 are stylish and durable.

DISCOUNT TO TECHNOLOGY.

469 Washington Street.

ST. BOTOLPH HALL.

NEW TECH. DORMITORY.

Favorably situated at the corner of St. Botolph and Harcourt Streets, near all the Departments of the Massachusetts Institute of Technology.

Furnished Suites To let, including heat and baths.

Restaurant in Building.

For terms apply on the premises.

M. DWYER,

GODFREY MORSE,

Manager.

Proprietor.

Banjo, Mandolin and Guitar.



G. L. LANSING,

Teacher, and Director of Clubs, 58-A WINTER STREET, BOSTON.

BEST INSTRUMENTS CONSTANTLY IN STOCK. MUSIC, STRINGS, ETC.



J. C. LITTLEFIELD,

Tailor and Outfitter,

21, 23 BEACON ST., BOSTON.

Exclusive Styles for Young Men

DRESS SUITS A SPECIALTY.

DISCOUNT TO STUDENTS.

Drawing Boards, Papers,

Inks, Pens, Instruments, and Fountain Pens

At Discounted Rates.

A. D. MACLACHLAN,

Tech Co-operative Store,

214 Clarendon St., - - Boston, Mass.

BOOKBINDING

IN EVERY STYLE.

ALEX. MOORE, 3 School Street, BOSTON.

C. E. RICHARDSON,

AGENT FOR DARTMOUTH LAUNDRY.

Coolidge & Caswell, Prop'rs, 141 Dartmouth St., Boston.

Orders by mail receive prompt attention.

Goods called for and delivered without extra charge.

WALTER C. BROOKS & CO.,

TAILORS

—-то---

M. I. T. CO-OPERATIVE SOCIETY.

15 MILK STREET, BOST(N, MASS.

BIRTHPLACE OF FRANKLIN.

DAME, STODDARD & KENDALL, GYMNASIUM OUTFITTERS.

SUITS A SPECIALTY.

SHOES, TIGHTS, SHIRTS, STRAPS, ETC.

Special discount to Tech men on these goods.

NO. 374 WASHINGTON AND NO. 2 FRANKLIN STREETS.

STANDARD CLOTHING CO.,

MANUFACTURING RETAILERS OF

HIGH GRADE CLOTHING

From both Foreign and Domestic Fabrics.

ALSO ADVANCE STYLES IN TROUSERS, SUITS, & OVERCOATS. Full Dress Suits Constantly on Hand.

395 WASHINGTON ST.,

BOSTON, MASS.

DR. E. L. JORDAN, DENTIST.

23 TREMONT STREET

BOSTON.

Opposite Boston Museum.

The only place in Boston where Teeth can be excavated for filling Without Pain.

Gentlemen! I wish to call your attention to the fact that I am paying the highest Cash Prices for Cast-off Clothing. Also Cleaning and Repairing done at short notice Send postal to

M. KEEZER,

105 Lamartine Street, Jamaica Plain, Boston.

I can be found outside the Technology Buildings on Boylston St. daily

THE

Union Gymnasium.

48 BOYLSTON STREET,

(Near Tremont St.)

SPACIOUS. PRACTICAL. POPULAR.

Complete Modern Apparatus.

Marble and Concrete Bath Rooms, with Shower, Sponge, Needle, Douche, and other baths.

Dressing Rooms.

Extra Large Lockers.

POPULAR CLASSES.

Competent Instructors in attendance Day and Evening.
No Extra Charge for instruction.

Terms: \$5 and \$8 per year, according to hours of Exercise.

BOSTON YOUNG MEN'S CHRISTIAN UNION.

WM. H. BALDWIN, Pres.

GEORGE PEIRCE, Sec'y.



EYES.

CHAS. W. HURLL, JR.,

Practical Optician.

C.W.HURLL.JR. 409 WASHINGTONST. BOSTON.

SPECTACLES, EYE GLASSES, OPERA GLASSES THERMOMETERS.



Oculists' Prescrip-

Ten per cent discount to M. I. T. Students.

409 WASHINGTON STREET, ONE FLIGHT.

Between Winter and Bromfield Sts.

VOICE TRAINING AND ELOCUTION.

\$1.00 PER LESSON TO M. I. T. STUDENTS.

Stammering and other defects of speech treated.

**FOBES' HANDBOOKS, "DECLAMATIONS" Parts I.
and II., "RECITATIONS" and "READINGS" are 50 cts. each.
REFERENCES: Moses Merrill, Head Master Boston Public Latin
School; Frank Vogel, Assist. Professor Modern Languages, M. I. T.

WALTER K. FOBES, Room 37, Pierce Building, Copley Sq., Boston.



a novelty in ath Robes!

The famous Star & Crescent Bath Robes are now made in all the

LEADING COLLEGE STRIPES

Quality superb. Made under our "Fast Pile Patent." Price, in fine cotton terry, \$7.00; in fine wool terry, \$10. Delivered free. Returnable if unsatisfactory. If not found at your dealers', send to us mentioning college and enclosing price. STAR & CRESCENT MILLS CO., Philadelphia, Pa.



DORSENIA. — This

wonderful drug is simply applied to the gum for the extraction of teeth. Absolutely without pain. You are conscious of all that is going on, but suffer no pain whatever. A blessing to those who are troubled with heart or lung disease. No pain. No danger. No after effects. See page v.

AT RIDLER'S, Boylston Street, cor. Berkeley, leave orders for American Express. No extra change.

FOR SALE—A copy of the '94 Class Day Tech. Send 25 cts. L. S., Box 45, Cage.

WRITE to J. H. RYDER 2934 Washington St., or ask Whitten, '96 (Cage), about Ryder's Chapine for skin troubles.

COLLEGE FOOTBALL STICK PINS.



Solid Silver, Enameled in Every Color, 25 cents each. In ordering be sure and state color desired. Class Pins, Badges, etc. Send 2-cent stamp for the largest picture catalogue ever issued by any retail jeweler, nearly ready for mailing. WILSON BROS., No. 3-N Tremont Row, Boston, Mass. "The Big Clock."

... CALENDAR . . .

November 22d.—Meeting of the Electrical Society in Room 23, Walker, at 7.45 P. M. Meeting of the Society of Arts in Rogers, at 8 P. M.

November 23d.—Meeting of the Andover Club in Room 22, Rogers, at 1 P. M.

November 28th.—Christian Union Meeting in Room 27, Rogers, at 1.50 P. M.

November 29th.—Football game at Providence: Technology vs. Brown, at 10.30 A. M.

December 8th.—Annual Indoor Meet of the M. I. T. A. C., Exeter Street Gymnasium, at 2 P. M.

TECH STUDENTS

desiring a Church Home are invited to Shawmut Congregational Church. Rev. W. E. Barton, Pastor. Corner Tremont and Brookline Sts. Reading Room open every evening. Magazines, papers, books. COME.

Congregational Students please send name and address to Mr. Albert Beal, 15 Follen Street.

WANTED.—A complete file of "The Spectrum." Apply to R. N., Box 24, Cage.

WANTED.—Everybody to subscribe to The Tech.

WILL the person who has No. 6, Vol. IV., of the Tech kindly communicate with R. N., Box 24, Cage.

FOR SALE.—Color Sergeant's Chevrons. Address H. L. S., Box 45, Cage.

···ST. BOTOLPH HALL CAFÉ···

No. 38 ST. BOTOLPH STREET.

PRICES.			PRICES.
Regular Weekly Board		\$6.00	Single Meals, Breakfasts \$.40
Regular Weekly Breakfast and Dinner		5.00	" Luncheons
Regular Weekly Breakfast	•	2.50	·
Regular Weekly Dinner		3.00	
Regular Weekly Luncheon	•	1.50	Café is the finest of its kind in the market.

M. DWYER.

WHAT NATURE DOES for the grub, turning it from an unsightly object into a beautiful butterfly, LEWANDO does for last year's garments. The enjoyment of the clear, crisp air of Fall and Winter is greatly heightened by wearing the suit and overcoat freshened at LEWANDO'S.

LEWANDO'S

FRENCH DYEING AND CLEANSING ESTABLISHMENT,

Established 1829.

Largest'in America.



PRINCIPAL OFFICES:

17 TEMPLE PLACE. BOSTON.

365 FIFTH AVE.. NEW YORK.

BRANCH OFFICES:

BOSTON (BACK BAY) - - 284 Boylston Street. BOSTON (HIGHLANDS) - 2206 Washington Street. SOUTH BOSTON - - - - -393 Broadway. CAMBRIDGE - - - - 412 Harvard Street.

Our Laundry Work is the Best in Boston.

Bundles Called For and Delivered.

Our Office at 284 Boylston Street, is near the Institute.

CONTINENTAL CLOTHING HOUSE,

MEN'S, BOYS', AND CHILDREN'S CLOTHING.

GENTS' FURNISHINGS, HATS AND CAPS.

Fine custom work made from measure. Uniforms of every description. Special attention given to Technology and English High School Uniforms. Workmanship the best. Prices the lowest.

CONTINENTAL CLOTHING HOUSE,

Corner Washington and Boylston Streets, Boston, Mass.



WRIGHT & DITSON. FOOTBALL HEAD HARNESS.

OFFICIAL OUTFITTERS TO HARVARD, WILLIAMS, DARTMOUTH, BOWDOIN

and other New England leading Colleges.

We are the originators of the LACE FRONT FOOTBALL PANTS, which are by far the most serviceable for playing Football, and our entire line of Jerseys, SWEATERS, Jackets, etc., are beyond comparison. Our NEW ILLUSTRATED FOOTBALL CATALOGUE will be sent to any address. GOLF GOODS. We are headquarters for everything pertaining to Golf. Our book of Rules, with hints on the game, etc., is free.

Wholesale, 95 PEARL STREET.

WRIGHT & DITSON.

Retail, 344 WASHINGTON ST., BOSTON, MASS.

Send for our General Catalogue.

L. P. HOLLANDER & CO., FINE READY-MADE CLOTHING

Everything shown in our stock is exclusively of our own make, cut from patterns corrected to the latest fashions, and made from the best of materials. We respectfully solicit a comparison of prices and an examination of our styles, also

FURNISHING GOODS AND HATS.

202 to 212 Boylston Street.

Frank Wood, Printer.

352 Washington Street, Boston.

CHARLES G. ABBOT, S.B., M.I.T., '94.

Tutor in Mathematical, Physical and Chemical Subjects.

References: The Secretary, Prof. Cross, Prof. Drown, and others.

Address, 334 Broadway, Cambridgeport.

PAINLESS DENTISTRY

BY THE USE OF DORSENIA.

DR. YOUNG, Surgeon-Dentist,

Special attention to TECH boys.

EXETER LUNCH ROOM.

QUICK SERVICE!

BEST SANDWICH IN BOSTON.

A. ALGAR, 35-A EXETER STREET.

NEW * MAIL

HANDSOMEST AND FINEST HIGH-GRADE MADE!
11 YEARS' REPUTATION.



MEN'S AND LADIES' pattern .	\$115			
YOUTH'S NEW MAIL, a high grade	e Boys'			
Wheel	\$50			
Also TEMPLAR, best medium grade	Man's			
Wheel	\$75			
ATALANTA, Ladies' Pattern	· · \$75			
Other makes, Boys' Wheels	\$15 up			
A few Shopworn and Secondhand Wheels taken in trade at very low prices, bargains, \$25, \$35, etc. Catalogue and Secondhand list mailed for two 2-cent stamps.				

• WILLIAM READ & SONS • 107 WASHINGTON STREET, BOSTON

COLLINS & FAIRBANKS CELEBRATED HATS!



STYLES SPECIALLY ADAPTED TO YOUNG MEN

Mackintoshes, Umbrellas, Canes and Gloves. Sole Agents for Henry Heath's and A. J. White's London Hats.

NO. 381 WASHINGTON STREET, BOSTON.



Messenger & Jones,

HIGH-CLASS TAILORS

No. 388 Washington Street, Boston.

THE TECH

VOL. XIV.

BOSTON, NOVEMBER 22, 1894.

No. 9.

THE TECH

Published every Thursday, during the college year, by students of the Massachusetts Institute of Technology.

ANDREW DANIEL FULLER, '95, Editor in Chief.
CHARLES GILMAN HYDE, '96, Assistant Editor in Chief.
JOHN HOWLAND GARDINER, '95.
WILLIAM E. DAVIS, Jr., '95.
EDWARD ARTHUR BALDWIN, '96.

BENJAMIN HURD, Jr., '96.
REGINALD NORRIS, '96.
SHELDON LEAVITT HOWARD, '97.
WILLIAM THORNTON PARKER, '97.
RALPH SPELMAN WHITING, '97

EDWARD ARTHUR BALDWIN, '96, Secretary.

H. P. CODDINGTON, '95, Business Manager.

Subscription, \$2.50 per year, in advance. Single copies, 10 cts. each.

For the benefit of students THE TECH will be pleased to answer all questions and obtain all possible information pertaining to any department of the College.

Contributions are requested from all undergraduates, alumni, and officers of instruction. No anonymous manuscript can be accepted.

Entered in Post Office, Boston, Mass., as Second Class Matter.



N view of the very general dissatisfaction expressed by Ninty-four men over the time devoted to Thesis work, it seems fitting that the question of improvement be brought before the proper authorities before it is too late. While no fault could as a rule be found with

the number of hours in aggregate set aside on the course schedules, this period was so broken up into single hours that oftentimes they were practically useless. Inasmuch as the majority of theses undertaken by Technology men require careful experiment and investigation, it is of prime importance that unbroken periods be provided. Moreover, where recitations and lecture courses require attendance, experience has shown that men

desirous of high ranking are led to slight theses until, toward the end of the year, rapid and perhaps careless work is necessitated and the very purpose of the thesis is defeated.

The difficulty may be obviated either by allowing lectures and recitations to cease after a few weeks of the second term, and the remaining time devoted strictly to thesis work; or by setting aside one or two days a week, as necessity demands, throughout the term, for this purpose. If the problem be properly considered, there is certainly no reason why a remedy should not be forthcoming.

7S announced in another column, the Institute committee has attempted to ascertain the possibility of procuring for Technology a charter from the Phi Beta Kappa Society. Heretofore few chapters, if any, have been established in Scientific institutions. possibly on account of a natural conservatism in the academic colleges represented, or because the curriculum of the scientific college differs widely from that of the academic. Relying upon the size and the high standard which Technology has attained, however, and upon the fact that President Walker is one of the twelve members of the Phi Beta Kappa Senate, exertions have been put forth with some hope of success. It is only right that high standing should be rewarded here, as in other institutions, and election into this honorary society insures it most satisfactorily. The Senate meetings are held but once in three years—the next one coming in the near future. At that time our cause must be advanced, and with the amount of interest which is evinced among the instructors who are already members of the society, and by the mass of men at Technology, it is reasonable to hope that a charter will be granted.



E are pleased to note that the two lower classes took such an active interest in the Cane Rush. At the beginning of the year the outlook for a successful rush was dubious enough, but as time passed on the true Technology atmosphere

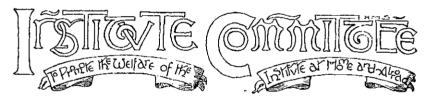
infused its rightful enthusiasm, and quite extensive preparations were made for the fray. With such commendable interest little fear of the annual Cane Rush being omitted from our college events need be entertained.

GAIN it is necessary to remind the Freshmen that The Tech awaits their contributions. Since little material has as yet been received from them, it has had difficulty in securing accurate reports of the proceedings of their various organizations. Although several Freshmen have shown their interest by personally forwarding matter, yet it is impossible for Ninety-eight to secure adequate representation through the columns of The Tech unless more contributions are received.

GAIN the subject of a Western trip has come up for consideration before the Glee and Banjo Clubs, and once more the question of support by Technology men and by our Western Alumni Association arises. Owing to the general financial stringency of a year ago, and the consequent uncertainty of a suitable backing, the project for an initial tour was given up. For many reasons it is unfortunate that the matter was delayed; each year renders it more difficult to undertake, and only widens the impression that the thing is not feasible. While we realize the fact that a

large fund must be forthcoming before the trip is completed, nevertheless with a suitable guarantee from our alumni in Chicago, together with the amount which will result from the Midwinter Concert, a sufficient sum should be raised to insure the carrying out of the plan. Moreover, by giving concerts in the larger cities on the route the relative cost will be proportionately less. The enthusiasm in the clubs has been so great that already a proposal has been made by the members to contribute individually a large amount.

The benefits which will accrue to Technology from a trip to Chicago will be manifold. With the standard which the Banjo Club has attained, and the constant improvement in the work of the Glee Club, successful concerts are assured.

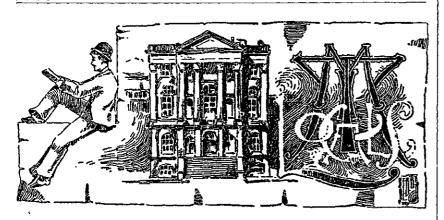


WITH the meeting of Monday afternoon, November 12th, the Institute Committee fairly began upon its work for 1894-95. With two years of history, the committee is able the more readily to comprehend its powers and to bring to a consummation the plans proposed and formulated a year ago. Several topics of general interest to Technology men were considered, and a decided action taken upon them. The matter of adopting a satisfactory pin which should be representative and authorized was brought up, and after some discussion it was unanimously agreed to again open the competition for designs. While it is hoped that a wide range of ideas will be displayed by men handing in designs, it is desired that the pennant form be well represented. The great fault to be found in the work of last year was the intricacy of the designs and the consequent difficulty of reproduction in metals.

The subject of having a more extended recess at Christmas was advanced, and suitable action will be immediately taken by the committee.

In view of the spasmodic and oftentimes ineffectual attempts made by members of Technology in leading the cheering at all Athletic contests, the committee voted to confer with the Athletic Association and insure the appointment of eight men, from the Senior and Junior classes, to serve in this capacity for the year.

Inasmuch as the committee is chosen from all Technology to represent the college, it was thought advisable to place its picture in the coming "Technique." Following out the efforts of the former committees, a sub-committee, consisting of Messrs. Canfield, Hayden and Hyde was appointed to see what could be done toward obtaining a Technology charter from the Phi Beta Kappa Society. Very little was done during the past two years, on account of the triennial meetings of the Society Senate, the first meeting since the formation of the Institute Committee being held during the coming year.



Oh! what a rush!

Powers is taking up the hurdles.

Coonley is training for the hurdle race.

R. D. Farquhar is training at the B. A. A. Boeseke is out for the standing three jumps. Morrill, '96, should make a good shot putter.

Exercises in first-year Trigonometry began last Tuesday.

Will you have a letter box? Two terms for a dollar and a half.

The benches which have been removed from the gymnasium are missed.

Six of the nine contestants in the cross-country run represented Ninety-Six.

A. Sargent, Captain of the Freshman Track team, is developing into a fast sprinter.

Lecture VI., Military Science, is now ready, and may be obtained at the Bursar's office.

Ninety-six men in all courses except VI., VIII. and IX., begin laboratory work in Physics this week.

A much-needed improvement has been made in the water pressure of the upper rooms in the Architectural building.

THE TECH is indebted to the '96 "Technique" Board for the miniature displayed recently in an attractive bulletin.

The 'Varsity practiced on the Berkeley Oval by electric light for the past week, as the men were unable to get out before 4.30.

Ninety-eight has made an exceptional record in draughting, as shown by the bulletin in the Mechanical Drawing Room.

The game of Saturday, which was canceled with Tufts and was finally arranged with Trinity, was the last home game of the season.

During the remainder of the term the office of The Tech will be open on Mondays from 9 to 10 A. M., and on Fridays from 9 to 11 A. M.

A special Thanksgiving number of THE TECH will be issued next Wednesday. It will contain a full account of the class football game.

All men who desire to become members of a Technology Corinthian Yacht Club are requested to hand in their names to M. W. Allen, '96, Cage, at an early date. Some thirty people were turned away from Professor Homer's lecture last Monday evening, on account of insufficient accommodation in Room 11, A.

The Andover Club will meet in Room 24, Rogers, at I P. M., Friday, November 23d. A full attendance is desired. The committee on supper will report.

Lectures in Dynamo Electrical Machinery for fourth-year students in Courses I., II. and III., will begin on Saturday, November 24th, at 9 A. M., in Room 22, Walker.

In Professor Richards' sketch of the late Mr. C. O. Parsons' life, Mr. Parsons was said to have been a member of the class of '75, while he really graduated in '73.

Another lunch society has been organized in Course IV., called "The Bean Club," consisting of C. K. Nevin, G. Fresch, M. Sax, R. Henry, L. C. Cannon, M. J. Sturm.

The English Department has reached unique theme subjects. One recently given out was, "Why some particular horse-car conductor is better than any other horse-car conductor."

Mr. C. C. Bartlett, of the Chauncy Hall School, found a pair of glasses with case near Rogers, last week. The owner may have the same by calling at The Tech office, and identifying them.

Now that the Cross-country run is over, the athletes are looking forward to the indoor Class Championships. The gymnasium is hardly roomy enough to accommodate the aspirants for athletic honors.

On account of changes which it was found necessary to make in the piping in the Engineering Laboratories before connecting with the new boilers, class work was suspended on Friday and Saturday of last week.

Ninety-eight has adopted this as a class yell:—

Ninety-eight, ninety-eight, rah, rah, rah, rah! Ninety-eight, ninety-eight, rah, rah, rah, rah! Hoorah. Hoorah M. I. T. Ninety-eight, rah, rah! The following men are requested to call at the Cage for mail: E. D. Barry, E. S. Chapin, E. A. Coleman, H. M. Crane, G. E. Harkness, C. F. Harmon, R. Harris, C. S. High, J. H. Sears, Mr. Thorndike and W. B. Wood.

On Thursday last over two hundred and fifty Juniors assembled on the steps of the Natural History building to have a class picture taken for the "Technique." The attempt proved unsuccessful, and another trial was made Tuesday.

The following mentions were made in fourth year pen-and-ink work, Course IV.: 1st, H. Von Holst; 2d, C. M. Gay, Jr.; 3d, R. D. Farquhar; 4th, E. L. Wengren. The mentions in second year are: A. C. Nash, Lucy D. Thomson, J. A. McElwaine.

The M. I. T. Alumni Association held a "Smoke Talk" in the Architectural Building on Wednesday, November 21st, at 7.45 P. M. President Walker gave "An Unpartisan View of the Tariff History of the United States." The Architectural and Engineering Buildings were open for inspection.

The Photographic Society held its yearly meeting for the election of officers Tuesday noon, November 13th, in Room 26, Rogers. Herman Poppenhusen, '98, was elected President; W. M. Partridge, '96, Vice President; E. J. Loring, '95, Secretary; A. C. Lawley, '97, Treasurer; F. Kleinschmidt, '95, fifth member of the Executive Committee.

The field music of the 2d battalion is now partly organized. It consists of chief musician, O. L. Leonard; musicians, C. H. Pease, R. R. Rumery, W. L. Learned, and J. F. Lickman. Only two applications for positions in the field music of the 1st battalion have been received, and more are desired.

The second regular meeting of the Electrical Engineering Society will be held in Room 22, Walker, on Friday, November 23d, at 7.45 P. M. Mr. L. F. Howard, '95, will

read a paper upon the Determination of Electro-motive-force Curves, and Mr. D. N. Marble will speak on Electrical Photography.

Students desiring tickets to Springfield, Saturday, may obtain them by sending their names and addresses to F. L. Woodward, 22 Perkins Hall, Cambridge. The tickets are issued by the N. Y. & N. E. R. R. The fare for round trip is two dollars. If sixty M. I. T. men desire to go this way a special car will be reserved for them.

The Deutscher Verein met on Wednesday afternoon, November 14th, in Room 27, Rogers. Sixteen new members were elected to the Society, and the names of several new applicants were presented. Mr. George Ulmer was elected on the Programme Committee for the Class of '98, and Mr. Arthur Spiess was elected on the Executive Committee for '97. Mr. Karl E. von Jungenfeldt spoke of his adventures in the Far West and in Mexico, relating a number of humorous experiences.

The semiannual examinations in military tactics will consist of a competitive drill, the result of which will determine the appointment of two color sergeants and two color corporals. The first Battalion will drill on December 24th, at 3.30 P. M., after the regular drill; and the second Battalion on December 28th, at the same hour. No written examination will be given, as standing will be determined by individual inspections held during the term.

The Civil Engineering Society held its second regular meeting Thursday evening, November 15th, in Room 11, Rogers. The programme consisted of a paper by F. C. Schmitz, '95, on "The Improvement of the Mississippi Channel"; a review of engineering periodicals by Messrs. G. E. Stratton and R. E. Bakenhus, '96; and a biography of Robert Stephenson by C. E. Trout, '96. The plan of leaving the programme entirely in the hands of the students, instead of procuring

outside lecturers, as last year, seems to be beneficial, and the officers feel confident of a successful year.

Last Saturday evening several of the students from the Southern States met at Mr. Carr's room for the purpose of organizing a Southern Club. A constitution was adopted and officers elected with the following result: President, E. B. Cunningham; Vice President, C. E. Lawrence; Secretary and Treasurer, R. W. Carr; Executive Committee, L. L. Gailiard, J. M. Howe, F. P. Blake. There were enrolled eight others as members who were present. The club is purely a social organization, having for its object the bringing together of the men from the South. Any applicant may become a member on the presentation of his name by some member of the club and by a majority vote.

Ninety-six held its second meeting of the year on Wednesday, November 14th, at one o'clock in Room 11, Rogers. The class voted to advance money to the "Technique" Board to cover the expense of publishing the class photograph in the annual; also to sustain its share in the cost of insertion of the Institute Committee picture. Mr. Hurd requested material in the shape of grinds, quotations and artistic work, and Mr. Rockwell, as Athletic Captain, spoke of the prospect of winning the class championships for 1894-95. It was agreed to offer two prizes of five dollars each for the best class design and class history for the "Technique." Mr. Harrington reported progress on the pin committee, and the meeting was adjourned.

The following notice was recently posted on the general bulletin board: "While the Institute letter rack is designed to accommodate students to the greatest extent practicable, it is impossible to afford the best service to students who do not rent letter boxes. Accordingly, it is requested that students who have no boxes, arrange, so far as possible, to receive their correspondence, including official notices, elsewhere. The proceeds of box rental will be devoted as heretofore to scholarships. If telegrams or special delivery letters are received for students not found in the rooms of the Institute, they will in general be forwarded to the attendance card address, and, in case of telegrams, a memorandum will be sent to the letter rack. When advertising matter is received in large quantities it will be made accessible outside the letter rack, and will, at the expiration of ten days, be returned to the Post Office unless the contrary is desired."

On November 8th, a meeting was held between the cane-rush committees of the Sophomore and Freshman classes, to arrange the details of the annual rush. Mr. Allen and Mr. Parker represented '97; Mr. Willis, Mr. Leiper, and Mr. Mara, '98. The date of Wednesday, November 21st, was accepted as proposed by the 'Varsity football management, which has assumed each year full charge of the Sophomore-Freshman game. It was agreed that the rush should take place as soon after the football game as the men could conveniently form.

Mr. Thomas, '95, and Mr. Hurd, '96, were chosen to act as referees, and were given the power to rule a man out of the rush for fouls. A pistol shot from one of the referees would open the contest, while two or more shots in rapid succession would announce the end of the time agreed upon. The Freshman committee gave a guarantee on behalf of its class that the cane would not be intentionally carried from the center of the field during the contest, and that the class would not avail itself of any position of advantage, fence, building, etc., and would not employ any means other than the physical efforts of its members to protect the cane.

In discussing the duration of the rush, it was found that the Freshman committee wished a shorter time than the Sophomores felt able to allow, while neither side saw a way to effect a compromise. An arbitration

committee, consisting of Mr. George, Mr. Thomas, '95, Mr. Greene, '95, Mr. Hurd, '96, and Mr. Rockwell, '96, was chosen. This committee met on the 12th of November, and decided upon twenty minutes as the length of the rush, which was approved by the class committee.

Technology, 4; C. A. A., 4.

では、「日本のでは、「日本のでは、日本の

TECHNOLOGY played one of the hardest-fought and most exciting games of the season with the Chicago Athletic Association, at the South End grounds, last Monday. The play from start to finish was strong and snappy, and abounded in brilliant runs and fine interference. The ground was slippery in places, and although this added to the roughness of the contest, it did not prevent a good exhibition of football. The weather was perfect, cold, and crisp, and infused enthusiasm into spectators and players alike.

The Chicago eleven were much heavier than their opponents, and their gains were almost always due to mass plays. Stevenson, Mc-Cormick, and Thomas formed an invincible trio, and opened gaps in the opposite line with ease. Van Doozer played the best game for Chicago behind the line, and his gains at critical times did much for his team.

Technology's strength was behind the line, where Thomas, Hayden, Rockwell, and Underwood showed some of the prettiest interference seen this year. The right end and tackle were very strong, but the Chicago backs made a weak spot at left end and left tackle by constant hammering. The center and guards were shaky during the first half, but rallied in the second and stood firm. Rockwell played the star game for Technology, and his beautiful run in the second half enabled his team to score.

Rockwell opened the game with a 40-yard kick to Henry, who returned the ball, by fine interference, to Chicago's 45-yard line. Chicago then made slight gains through

Technology's line, and after trying to run her ends, lost the ball on four downs. Rockwell and Thomas netted ten yards, then Underwood was forced to punt. Swift got down the field in fine shape, and Chicago had the ball on her 40-yard line. The visitors then started in with a rush, and by constant hammering at Technology's line, carried the ball down the field for a touchdown. No goal was kicked. Score, 4 to 0.

Rockwell kicked to Van Doozer, who was downed without a gain. Then Chicago forced the ball to Technology's 30-yard line, where it was lost on four downs. During these plays Chicago used her tackles with great effect. Underwood was forced to punt; the half closed with the ball in the center of the field.

The second half opened with a kick-off to Thomas on Technology's 30-yard line. Rushes by Rockwell and Hayden and a pretty 15-yard dash by Ames carried the ball well into the visitors' territory, where it was lost on downs. Chicago then made slight gains, but lost the ball to Le Moyne on a fumble. Hayden was injured in the next play, and Howland came in to take his place. After two short gains Rockwell broke through right tackle and dashed down the field. The excitement was intense, and most of the spectators did not know for a moment whether he had scored or not. He was downed within a foot of the goal line, and Technology braced herself for a final effort. Twice the Chicago line withstood the desperate plunges of Thomas and Rockwell; then the former was pushed over, tying the score. Underwood failed to kick a goal.

Technology was unable to gain much after the kick-off, and the ball went to C. A. A. at the center of the field. Jackson then made a magnificent run around left end for thirty yards, and a moment afterwards around right end for fifteen more. The interference of the Chicago eleven in these two plays was remarkably fine. Chicago was gaining ground steadily when time was called.

TECHNOLOGY.		C. A. A.
Swift.	1. e.	Culver.
Washburn.	1 t.	Briggs.
McCormick.	l. g.	McCormick.
Manahan.	c.	Stevenson.
Le Moyne.	r. g.	Thomas.
Aultman.	$\mathbf{r}.\ \overline{\mathbf{t}}.$	Griffin.
Ames.	r. e.	Camp.
Thomas.	q، b،	Henry.
Rockwell.	} h. b.	∫ Wardner.
Hayden (Howland).	J	\ Jackson.
Underwood.	f. b.	Van Doozer.

Touchdowns, Thomas, Van Doozer; umpire, Hurd, H. P. A. C.; referee, Peters, B. A. A. Time, 20-minute halves.

Technology, 18; Trinity, o.

About one hundred and fifty football enthusiasts watched Technology defeat Trinity 18-0 on the South End grounds last Saturday in a drizzling rain. The playing on both sides was hardly up to the standard, and there was much more slugging than was necessary. The field was very slippery and few long runs were made, although Captain Thomas circled the end for thirty-eight yards in the second half, and Howland broke through tackle for a pretty run of twenty-five yards.

Trinity eleven was greatly weakened by the loss of two regular players, and Technology must put up a stronger game than on Saturday to defeat Brown on Thanksgiving Day.

Technology's line was like a stone wall, and the backs supported the rushers so well that Trinity's gains through guard and tackle were few and far between. Ames and Aultman worked splendidly together, and Trinity gave up trying to force them after several unsuccessful attempts.

Behind the line Rockwell did the best work during the first half, while Howland made some of the prettiest runs of the game, and followed his interference beautifully. When Rockwell retired, on account of injuries to his arm, Captain Thomas took his place and Mansfield came into quarter. Thomas undoubtedly played the star game for Technology. He ran oftener and for greater distances than the other backs, and his interference was a feature of the game.

Le Moyne, Aultman, and Ames did excellent work when called upon to run with the ball, and Le Moyne is especially good at bucking the line, on account of his strength and weight.

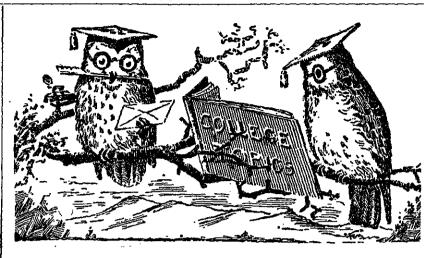
The game began at 3.15 with Langford's kick-off to Underwood. The ball changed hands several times on downs, and once it looked as though Trinity might score from Technology's 15-yard line; but the latter rallied, and by steady gains forced the ball down the field, and Underwood finally scored after thirty minutes play. No goal was kicked, and the score remained 4-o in Technology's favor.

In the second half Technology improved wonderfully, and the visitors could not keep the ball long enough to make an important gain. Technology had the kick-off, but soon recovered the ball and carried it down the field with a snap and dash that was woefully lacking in the first half. Thomas and Howland took turns carrying the pigskin, and Le Moyne scored after three minutes' play. Underwood kicked a goal, and the score stood 10-0.

Twice more Technology scored touchdowns, but the goal kicking was wretched, and the total of four touchdowns brought but eighteen points. Thomas was the life of the eleven, and all the men showed the effects of the coaching. The game was called by the consent of both captains on account of darkness, with two minutes more playing time left.

TECHNOLOGY.		TRINITY.
Rawson. Whiting. McCormick.	l. e. r. l. t. r. l. g. r.	Strawbridge. Penrose. Merwin.
Manahan. Le Moyne. Aultman (Coburn).	c. r. q. l. r. t. l.	Lord. A. Langford. Bewell.
Ames. Thomas (Mansfield).	r. e. l. q. b.	McCook. Coggeshall.
Rockwell (Thomas). Howland. Underwood.	h.b. f. b.	{ Dingwell. { Beecroft. W. Langford.

Touchdowns, Howland 2, Underwood, Le Moyne; umpires, Hayden, Waters; referee, McGann; time, 30 and 20 minute halves.



Two Yale men are now delivering a series of lectures throughout the country on "Football at Yale."

Five of the regular Yale 'Varsity football team and four of the substitutes prepared at St. Paul's School.

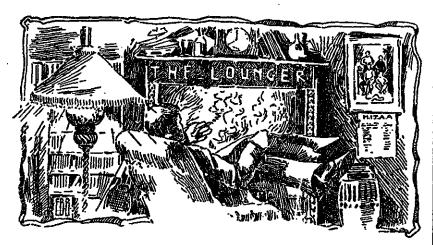
During the recent political campaign, forty-five students from the University of Wisconsin were on the stump for the various political parties.

The University of Pennsylvania and Cornell held a cross-country run November 17th. The representatives of Pennsylvania were chosen by two prize handicap runs.

All matters of discipline at Cornell are attended to by a student committee composed of four seniors, three juniors, two sophomores and one freshman. These are chosen by their respective classes and serve one year.

A proposition has been made to the Intercollegiate Athletic Association to send a challenge to Oxford and Cambridge for an annual meeting between the winners of the American intercollegiate championship and the winners of the Oxford-Cambridge meet.

The field at Hampton Park has been resolden, and is fast being put in shape for the game. Twelve hundred more seats will be provided this year than ever before,—divided equally between the Harvard and Yale sides. These seats will be added to the more desirable sections. The end sections are already up.



It was small comfort that the Lounger succeeded in extracting from his recent hebdomadal perusal of the bulletin boards, though a modest announcement well calculated to inspire eternally springing hope confronted him with the welcome intelligence that certain semi-annual examinations were to be omitted in the third and fourth years. While a single digit no longer suffices to denominate the Lounger's year, he still takes a lively interest in some of the subjects our Seniors pursue—least squares, for instance, having proved marvelously efficient in transactions with "Reddy"—and when welcome examination intelligence arrives, he rejoices accordingly.

Close inspection, however, failed to reveal to the most discerning eye any material decrease in the requirements, and with a melancholy smile the Lounger turned disconsolately away.

But it was with brighter mien that he beheld the oracle guardian's stern announcement on the near-by bulletin that "This board is for official notices ONLY." Attractive as are the imploring or mandatory pronunciamentos that find expression in the artistic work of the chirographic expert, it has always seemed as though this board might be indulged with a brief respite, and that it might occasionally bear some more cheerful announcement than the time-honored one about "Notes, for sale by the Bursar." With this thought, the Lounger lately rejoiced to see one of the customary hieroglyphic notices supplemented by a clear and concise invitation to "Buy The Tech," and later on by an effectively worded summons to the clans of Ninety-six for their class picture. But such unceremonious treatment of the patent be-castered and beswiveled blackboard was not regarded with favor by the authorities,—tended to lower its tone, they said, -and henceforth, the Lounger supposes, this coveted coign must be abandoned to cold and heartless proclamations from "official" sources.

Hazards on the state of the weather are, it seems, no more to be relied upon than the proverbial bestlaid plans of mice and men. Simooms and icy blasts alternate with such bewildering rapidity that one cannot safely predict two hours in advance. It may be regarded as excusable on this ground, that the Lounger's carefully prepared climatic effort which graced his page in last week's Tech seemed, perhaps, a trifle inopportune. Whether the fickle god who rules over Boston weather will have clasped all once more in his icy grip before the Lounger has another opportunity to retract, is of course highly conjectural, and might prove an interesting subject for a bet. At any rate the Lounger is forced to acknowledge a slight weakness in meteorological forecast, which even his years of experience have been unable to dispel. Sunshine, zero blizzards, and the other interesting phenomena which make up the jolly season of winter, have this year given no assurance of further reform in their waywardness, and the Lounger, like other mortals, must bow to the inevitable, and meekly accept whatever the gods may deign to send.

Neither election losses nor threatened flunks have been able to keep many lovers of the game from preparations to witness the great contest next Saturday. Attractive announcements of reduced rates and the vaunted charms of a special car have decided many an uncertain soul, and the Lounger is glad to know that Technology is to be well represented at Springfield. *The Herald's* able résumé of the Harvard-Technology question left one in delightful uncertainty, but the Lounger has been assured that Technology's delegation is sure to cheer for either Harvard or Yale, and his heart is at rest.

The old stagers who have seen every contest since "the year Harvard won," together with the expectant crowds of youths and maidens witnessing the great struggle for the first time, are to enjoy a royal good time. The bright masses of color, the crazy, cheering crowds, the whole brilliant scene which the last four years have witnessed under clear Yale-blue skies, form indeed a sight to cheer the veriest misanthrope, and make glad the heart of the crustiest curmudgeon that lives.

The Lounger does not look on this spectacle with any invidious eye. He realizes that such demonstrations are not to be seen on our own field, where our doughty players strive heroically in the inspiriting presence of a paltry two hundred. Buried under harsh restrictions and struggling against heavy odds, college spirit at Technology has had at best a hard time of it, which even the splendid victory at Worcester has not been able to ameliorate. But the situation seems to be changing in the right direction, and the Lounger hopes that the no distant day may see Technology occupy that position in the field of college athletics to which she ought to aspire.



AS PANTS THE HEART.

The bicyclienne in her bloomers gay,
Complacently went o'er the dusty way.
"Look at the pants!" was the hue and cry
That came from the lips of the passers-by.
That girl was vexed at the rude address,
And made up her mind to seek redress.

-Brunonian.

AN ACROSTIC.

First,—if you'll pardon some advice
Rendered in the humblest way,—
Emblazon not abroad your vice,
Smoking on the streets by day.
Hide, alas! your latent greatness;
Merit is ever truly blind.
Eager be to veil your wiseness,
Not to show vacancy of mind.

-Williams Weekly.

A curious Japanese dragon, Carven in tortoise-shell, Guards o'er my lady's tresses, Defending his treasure well.

As the fabulous flame-breathing monster Did in the days of yore,
When crouched in his dusky cavern
He guarded his glittering store.

Till the knight came charging toward him, Fearless, and brave, and bold, Who slew the sulphurous dragon, And captured all the gold.

Then hail to the happy hero
Who wins the treasure rare!
But, hero, spare the dragon,
He looks so well in her hair.

-Vassar Miscellany.

THE FOOTBALL CRITIC.

The football critic! O, he knows
The game well. Pray don't suppose
For an instant he doesn't. He's not
A poor cynic; he knows what's what
From his head right down to his toes.
The finest points he can disclose;
Of knotty problems he'll dispose;
O he's the man to plan and plot!
The football critic.

-Williams Weekly.

MY AUTOGRAPH.

My autograph she begged the night
When first her beauty filled my sight;
"Not just your name, you know," quoth she,
"But something nice besides; may be
A poem, or a maxim trite."
I yielded to the witching light
Of her soft eyes, and did indite,
Entwined with flowers of poesy,
My autograph.

She perches on my knee to-night,
And in her eyes, so clear and bright,
The old light dwells. Ah, woe is me!
My check book in her hand I see,
And once again she begs me write
My autograph.

-Ex.

TWO LITTLE GIRLS IN BLUE.

Two little girls in blue, lads,
Two little girls in blue,
In these rampant days of the bicycle craze,
Make way for something new.
For these two little girls in blue, lads,
According to popular rumors,
Have, people say, prepared the way
For two little girls in bloomers.

-The Widow.

A sophomore bold, and careless, and gay,. One afternoon of a winter day, Fixed himself up and went to a play; It was Richard III., and a matinee.

The sophomore sat in the front parquet; All was serene as a day in May, Until King Richard began to pray, "A horse! a horse!" in a faithful way.

When the sophomore sprang from his seat, they say, And cried, the poor king's fears to allay,

"I'll get you a horse without delay!
I know how it is! I have felt that way."

-Wabash.

NOYES BROTHERS



SHIRTS

For Business Wear. Negligee for Traveling. For Dress Occasions.

Most thoroughly made, and always in stock for immediate use.

Collars, Cravats and Gloves

constantly on hand, and made to order in the most thorough and elegant manner.

Wedding and Party Outfits.

OUR STANDARD \$1.50 SHIRT we believe to be the best value possible for the price.

BUSINESS AND DRESS SHIRTS, \$2.00, \$2.50, \$3.00. \$3.50, and Upward. All made in our own workrooms.

ENGLISH WATERPROOFS

For Ladies and Gentlemen,

For Storm, for Street, for Traveling.
The latest production, \$7.50 to \$45.00.

English Hold-alls.

Steamer Wraps and Rugs.

Negligee Coats. Students' Study Coats. English Dressing Jackets.

Smoking Jackets.

House and Office Coats.

Long Gowns and Wraps.

\$6.50 to \$50.00.

BLANKET WRAPS for Lounging, for the Nursery, for the Sick Room, for the Bath, for Steamer Traveling, for the Railway Carriage, for Yachting. For Men, Women, Children, and the Baby, \$2.75 to \$35.00, with Hood and Girdle complete.

PAJAMAS, or East India Sleeping Shirts, and Long Night Shirts, made from English Flannels, Cotton, and Silk, for Steamer, Sleeping Car, Yachting, or Hunting.

THE NEW CLUB CRAVAT and THE PRINCE'S CRAVAT for Gentlemen, new.

GLOVES, the New Gold Tan, the Famous London Tan at \$1.35, Fowne's New Cavendish Tan, Fowne's Red Tan.

NOYES BROTHERS, Washington and Summer Sts., Boston, U. S. A.

L E. FLETCHER & CO.,

HATTERS AND MEN'S OUTFITTERS.

HATS

in LEADING and CORRECT STYLES for YOUNG MEN

Novelties in Neckwear,

Gloves, Hosiery, and Underwear,

Canes, Umbrellas, Etc.

158 BOYLSTON STREET,

Opp. COMMON.

BOSTON.

OUR NEW STORE

For the accommodation of the Tech students is now open in the

Grundmann Studios, adjoining Architectural Building,

where we shall keep at all times a full line of

DRAFTING IMPLEMENTS, Drawing and Blue Process Papers,

Selected with especial reference to the requirements of students of the Institute.

SCALES, TRIANGLES, CURVES, T SQUARES, Etc.

Wadsworth, Howland & Co.,

INCORPORATED

82 and 84 Washington St., Boston. 267 State Street, Chicago.

SPECIAL RATES TO STUDENTS.

FALL OVERCOATS

UNDRESSED
WORSTEDS
\$20.

UNDRESSED WORSTED is a material particularly adapted for Fall Overgarments, and we have made up from this exclusive fabric, which is soft, warm, and at the same time light in weight, GENTLE-MEN'S OVERCOATS in fine twills and diagonals, which carry with them the distinguishing marks of gentility and conservative dressing.

The colors are dark, Oxford mixtures predominating, and the garments have been manufactured by us during the dull season, in our own clean and well-lighted work-rooms, in a manner equal to made to measure.

Gentlemen will find these coats, therefore (which are now ready for selection and to put right on for immediate use), exceedingly desirable in every respect at the price of

\$20.

A.SHUMAN & CO.

Manufacturing Clothiers.

Shuman Corner BOSTON.

LEADING OUTFITTERS

OF

High Grade Mackintoshes

For the Principal Colleges in New England.
Regular Co-operative Discounts.

METROPOLITAN RUBBER CO.

CLEVE & KRIM

49 Summer Street, Boston.

TECH STUDENTS

are cordially invited to inspect our work, which is the most artistic in the city.

Our place is a model of neatness, and we employ none but thoroughly competent men.

YOUR PATRONAGE IS RESPECTFULLY SOLICITED.

Copiey Square Hotel Hair-Dressing Parlor.

NOTMAN

PHOTOGRAPHIC COMPANY.

480 Boylston Street, and 3 Park Street.

٠ė٠

PHOTOGRAPHERS TO M. I. T., '94.

•••

Special Rates to Students.

SPECIAL NOTICE.

TO MY STUDENT TRADE:

I am showing this season a very fine line of English Novelties, and expect to add to my list of customers a large number of the Freshman Class.

C. J. NICKERSON, Tailor and Importer,

120 TREMONT STREET.

Cor. Hamilton Place, Phillips Building, Room 228.

As usual, I shall make a Specialty of Dress Suits. Formerly Cutter for F. D. Somers.

ARCHITECTURAL PHOTOGRAPHS,

The Largest?Collection in America.

All the best Public Buildings, Churches, Private Houses, and Business Blocks in Boston and New York.
Richardson's Works of Importance from all over New England. Also a complete line of

Art Photographs for Room Decoration.

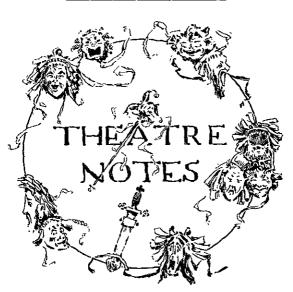
STUDENTS WELCOME TO EXAMINE, WHETHER DESIRING
TO PURCHASE OR NOT.

SOULE PHOTOGRAPH CO., Publishers, 338 Washington Street, Boston.

AT THE THEATRES.—Week beginning November 26th.

Hollis.—Second and last week of Mr. E. H. Sothern, under management of Dan Frohman, presenting "Lord Chumley," "Captain Lettarblair," and "A Way to Win a Woman."

COLUMBIA.—Last week of the Columbia's distinguished success, "Sowing the Wind," by Sydney Grundy, under management of Chas. Frohman.



PARK.—Edward Harrigan and his New York Company in "Old Lavender," "Reilly and the 400," "Cordelia's Aspirations."

Boston.—"In Old Kentucky." Greatest success in the history of Boston theatricals; theatre packed at every performance.

LYCEUM.—The Great Fitzsimmons Combination. Usual prices.

Castle Square.—"Captain Paul," a romantic play by Edward E. Rose.

Nothing like the 3d act ever placed upon a stage before.

Boston Museum. — Last week of merry, mirthful, musical "Prince Pro Tem;" closing a run of 167 performances. Good-bye to Tommy Tompkins.

Matinee at 2. Evenings at 8.

Boston Polo Rink.—Corner Shawmut and West Newton Streets. Polo games every Tuesday, Wednesday, and Friday evenings. Admission 25 cents.

COES & STODDER,

14 SCHOOL STREET.



A Discount of 10 per cent given to TECH Students.



Specialty: Dress Suits, Silk Lined, \$45.

F. C. CUMMINGS, Tailor,

No. 299 Washington Street, Boston, Mass.

F. L. DUNNE, TAILOR AND IMPORTER.

A SPECIALTY MADE OF

Suits for Riding, Shooting, and Golf.

Breeches for Riding, Hunting,
Racing, and Polo.

TRANSCRIPT BUILDING.

328 Washington Street, corner Milk, Boston.

COWLES ART SCHOOL,

145 Dartmouth Street.

Special attention given to Evening Classes for Tech Students in life and cast drawing.

Address -

F. M. COWLES, Agent.

Tuition, \$4.00 per Month.

Three Evenings per Week.

THE BRUNSWICK

BOSTON.

Boylston and Glarendon Streets,
(Adjoining Copley Square)

Near the Museum of Fine Arts, New Public Library, New Old South Church, and opposite Trinity (Phillips Brooks') Church, and Institute of Technology.

KEPT ON BOTH AMERICAN AND EUROPEAN PLANS.

BARNES & DUNKLEE, Proprietors. H. H. BARNES, Manager.



Tremont Street Foreign Book Store,

149-A TREMONT STREET, BOSTON.

Large Stock of Foreign and American Books in the Ancient and Modern Languages.

Scientific Works in all Departments. Regular Importations from the book centers of Europe.

Lowest Rates to Technology Students.

KOEHLER, NEUMANN & CO.

Foreign Booksellers and Importers.

TEXT-BOOKS, DRAWING MATERIALS, CORRESPONDENCE PAPERS, STUDENTS' SUPPLIES.

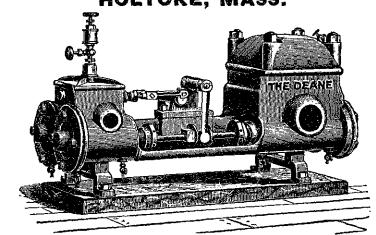
C. E. RIDLER.

BOYLSTON AND BERKELEY STREETS, BOSTON.

The M. I. T. Supply Store.

DEANE STEAM PUMP CO.

HOLYOKE, MASS.



·STEAM·PUMPS·

Boston Office: 54 Oliver Street.



The Richmond Straight Gut No. 1 Gigarettes.

Cigarette Smokers who are willing to pay a little more than the price charged for the ordinary trade cigarettes, will find this brand superior to all others.

Cigarettes are made from the brightest, most delicately flavored, and highest cost Gold Leaf grown in Virginia. This is the Old and Original Brand of

Straight Cut Cigarettes, and was brought out by us in the year 1875.

Beware of imitations, and observe that the firm name as below is on every package.

ALLEN & GINTER.

THE AMERICAN TOBACCO CO., SUCCESSOR,

Manufacturer,

RICHMOND, VIRGINIA.

KEEP'S SHIRTS

Our Celebrated "K" Quality Stock Shirts, open back or open front, or both, and with different sleeve lengths.

85 cents each Unlaundered, \$1 each Laundered. Keep's \$1 Street Gloves are Famous.

KEEP MANFG. CO., 114 Tremont Street, Boston.

Scientific Books

DAMRELL & UPHAM,
The Old Corner Bookstore,
283 Washington St., Boston.

GEORGE H. GREENWOOD,

9 AND II BOYLSTON STREET.

Offers the largest stock of ..

English and French Briar Pipes

Ever shown in Boston, at very low prices.

ALBERT BENARI, Tobacconist.

33 TREMONT STREET, -

- Boston, Mass.

Cigarettes, Tobacco, and Smokers' Articles. Agent for Hale's Smoking Mixture.

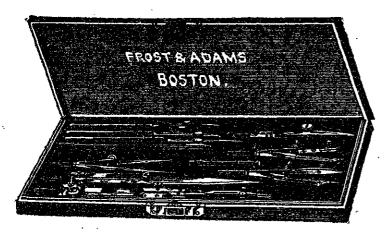
GRAND HOTEL Wair Dressing Parlors,

417 COLUMBUS AVENUE.

Hair Cutting in all the Latest Styles. Students' Work a Specialty.

T. F. NAGELS, Manager,

Formerly of Palmer House Shop, Chicago.



A BOOK OF ALPHABETS...

Prang's latest, the most complete book of its kind published — former price, \$5.00; for the next thirty days, \$2.50.

FROST & ADAMS,

Importers of Mathematical Instruments, Artists' Materials and Picture Frames,

37 Cornhill, Boston, Mass.

Send for Illustrated Catalogue.

LIBERAL DISCOUNT TO M. I. T. STUDENTS.

GO WEST.
Cut Rates.
FOGG.
277 Washington Street, Boston.
Mileage—all routes.



Preparation for the

Established in 1828.

Massachusetts Institute of Technology.

THIS HAS LONG BEEN A SPECIALTY AT

CHAUNCY HALL SCHOOL.

REFERENCE is made to the INSTITUTE FACULTY in regard to the thoroughness with which Chauncy-Hall pupils are fitted, not only for entering the Institute, but also for pursuing successfully their subsequent work. Preparation, also, for business and for college.

No. 593 Boylston Street, Boston.

(Very near the Institute.)

THE

Leading Photographer

CERTAINLY has attained success. His success is proven by the number of patrons who daily visit the studio and take away with them the evidences of his skill and artistic ability. Before going elsewhere call at

21 WEST STREET,

BOSTON.

A. McMILLAN.

A. McMILLAN, Jr.

A. McMILLAN & SON,

Tailors and Importers,

288 BOYLSTON STREET (Opposite Public Garden), BOSTON.

TECH men are specially invited to examine our line of Scotch novelties in Suitings, which have been imported directly by us.

Our stock in other lines is very complete.

TELEPHONE, TREMONT 1017.